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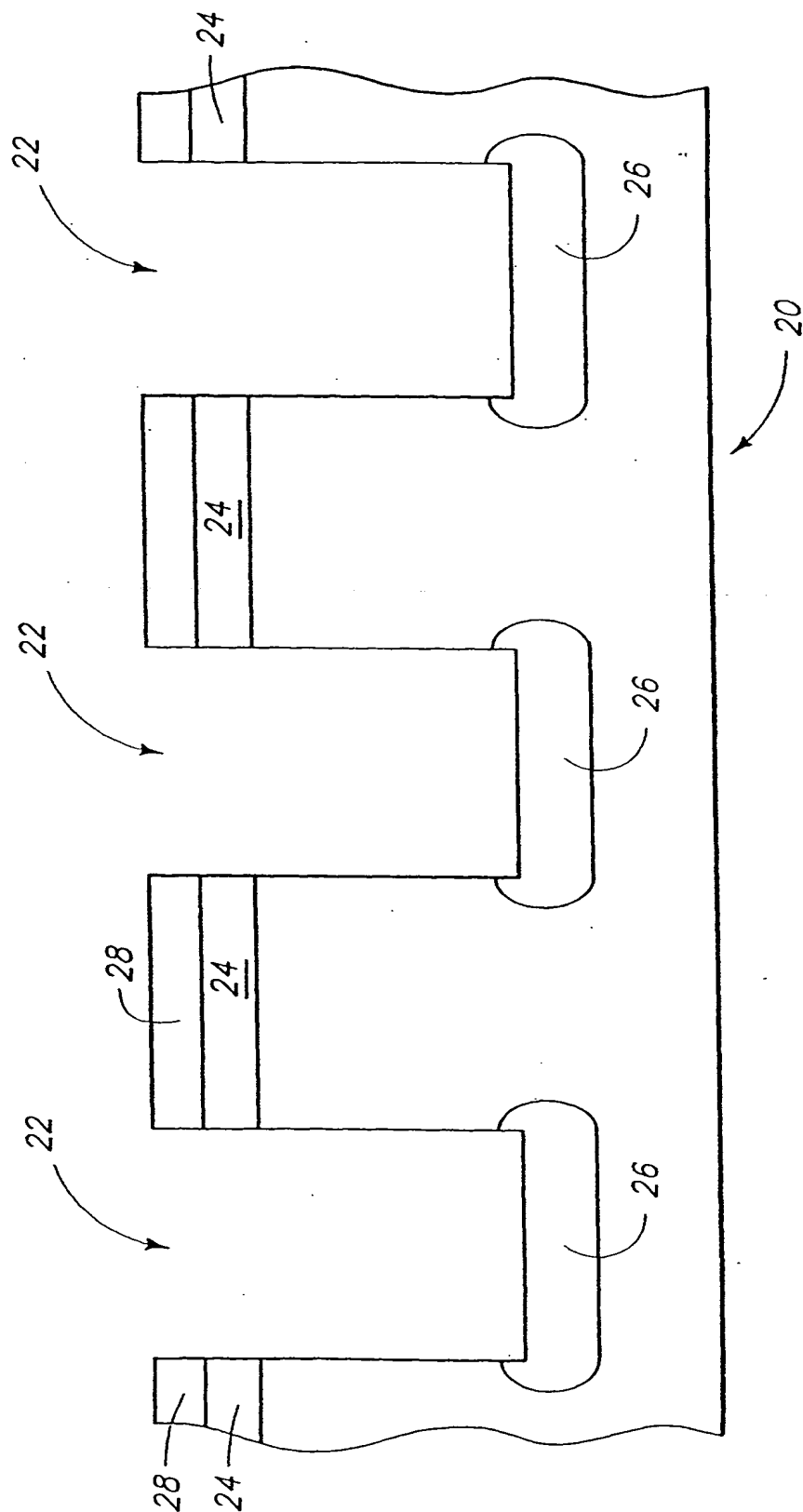


Fig. 1

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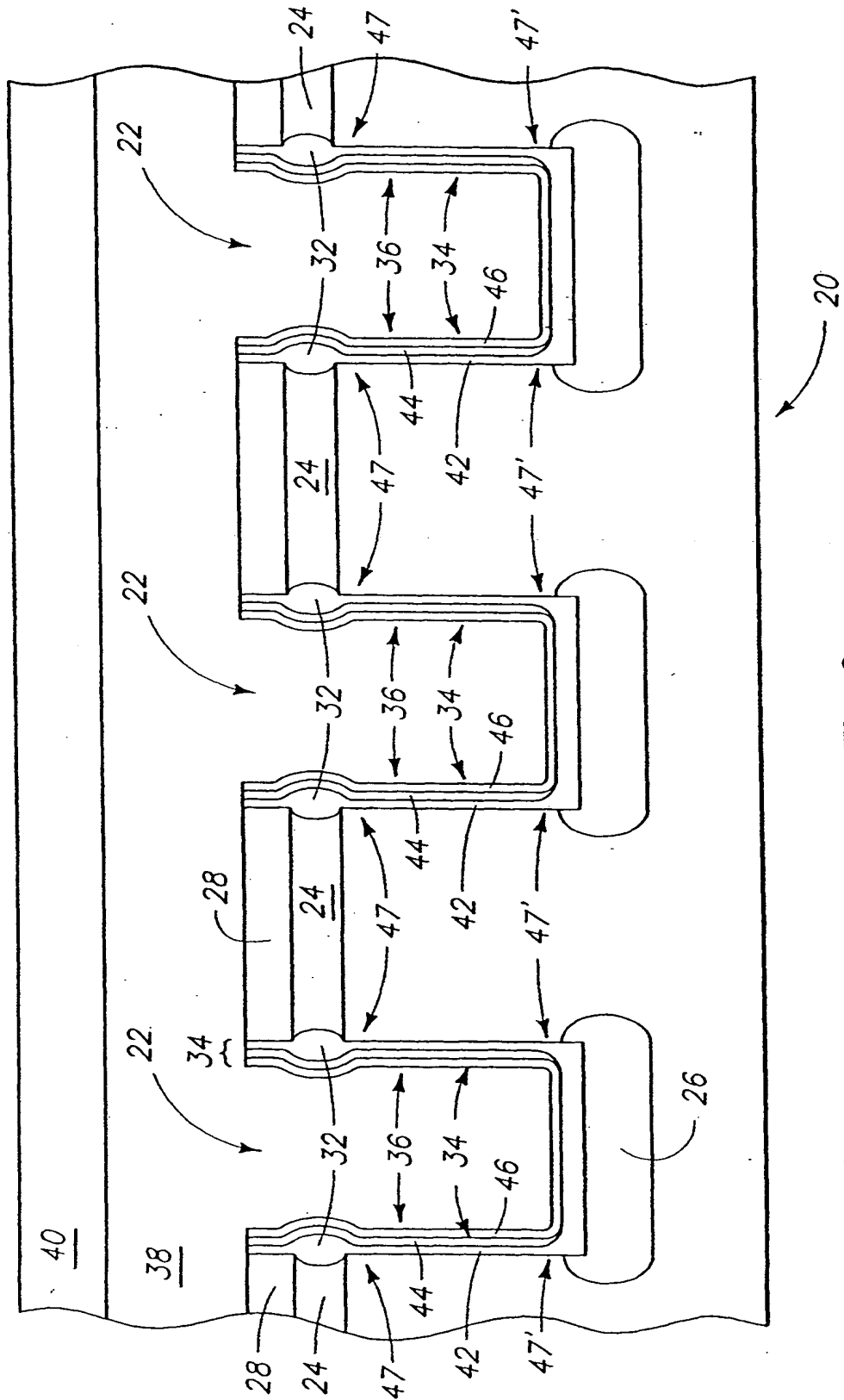


Fig. 2

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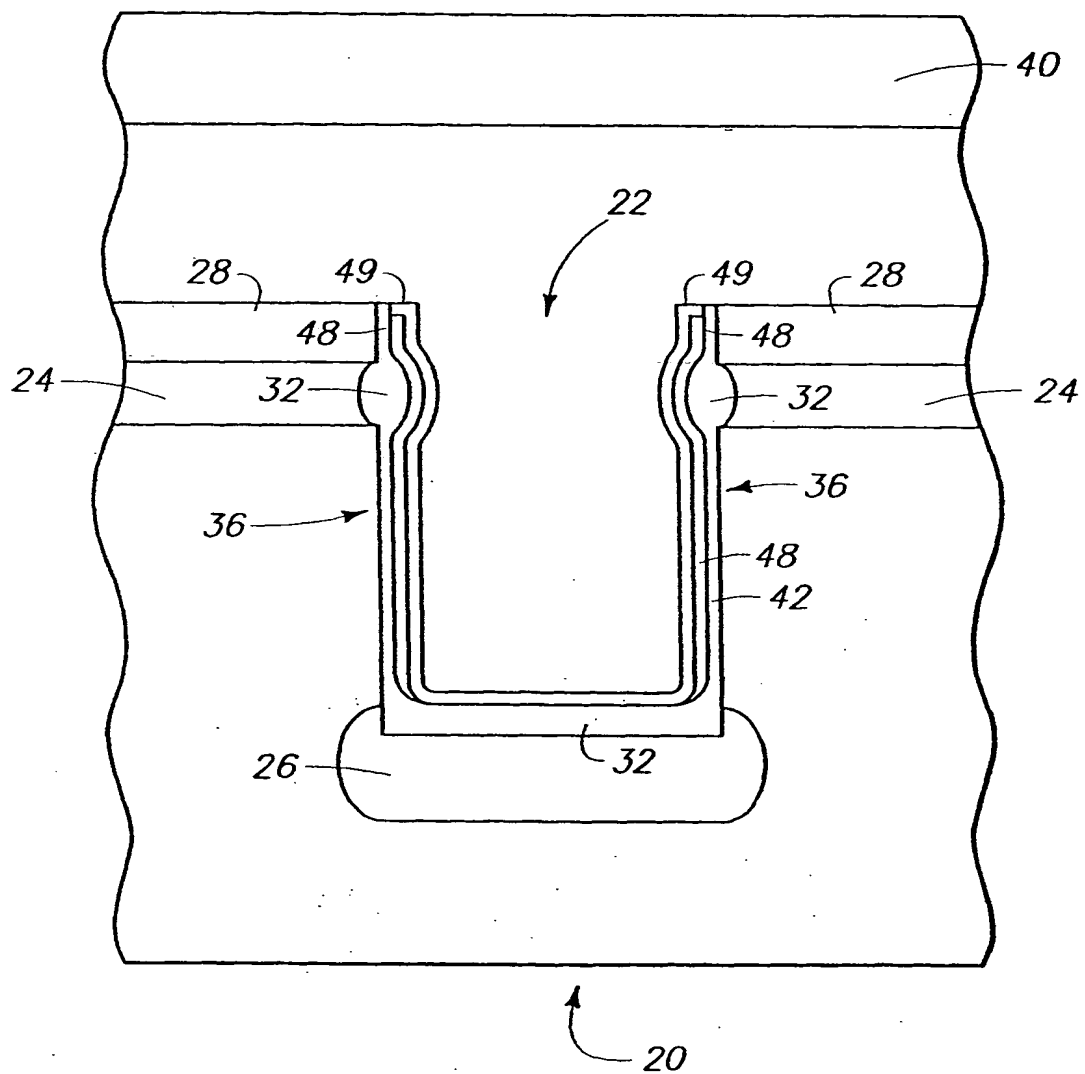


Fig. 3

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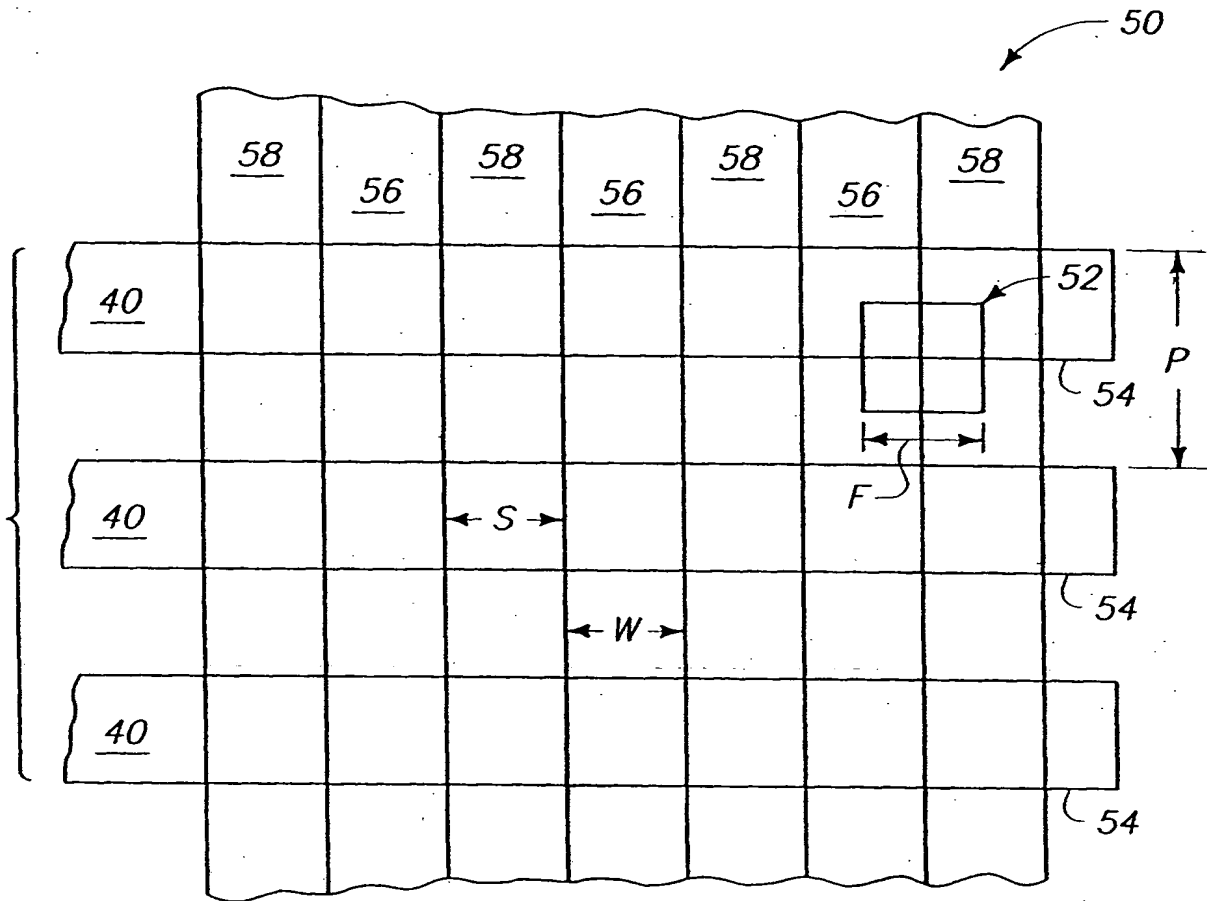


Fig. 4

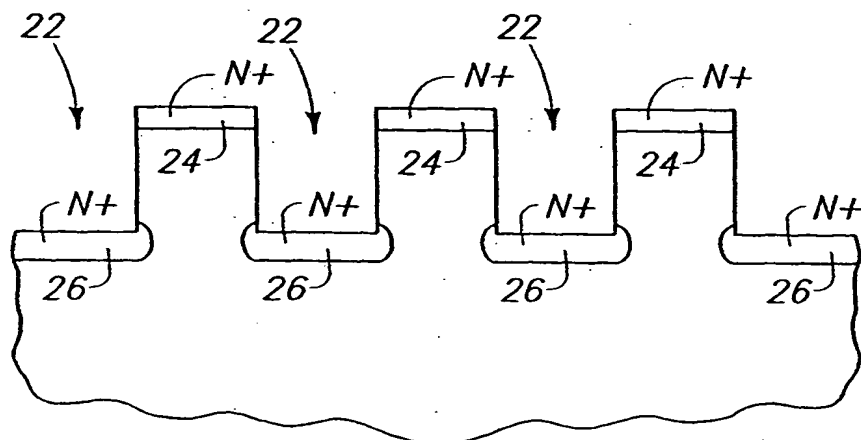


Fig. 5

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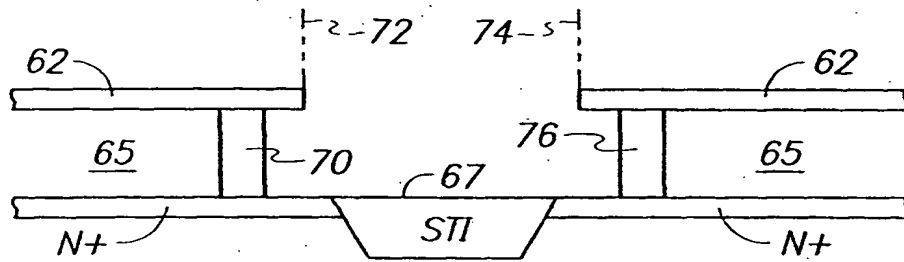


Fig. 7

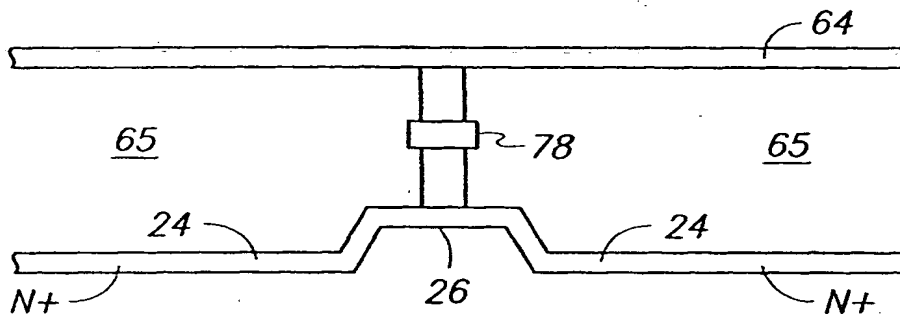


Fig. 8

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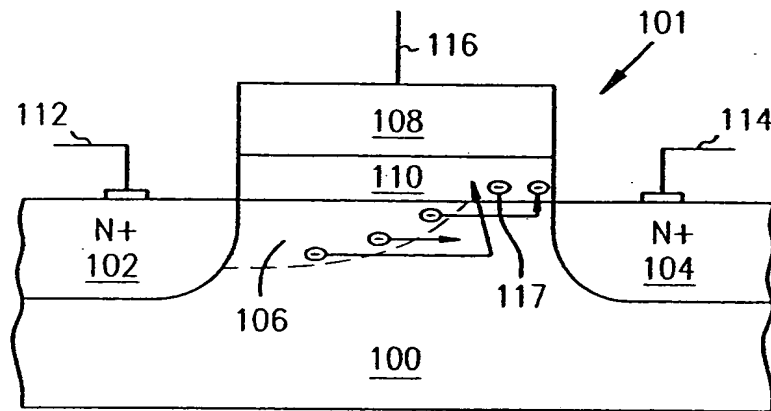


Fig. 9A

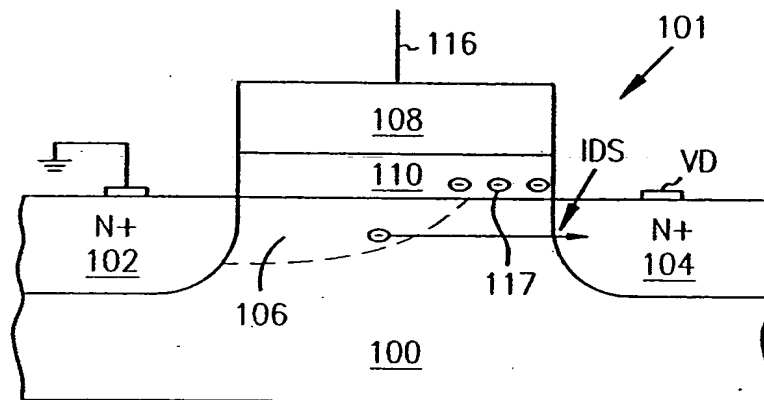


Fig. 9B

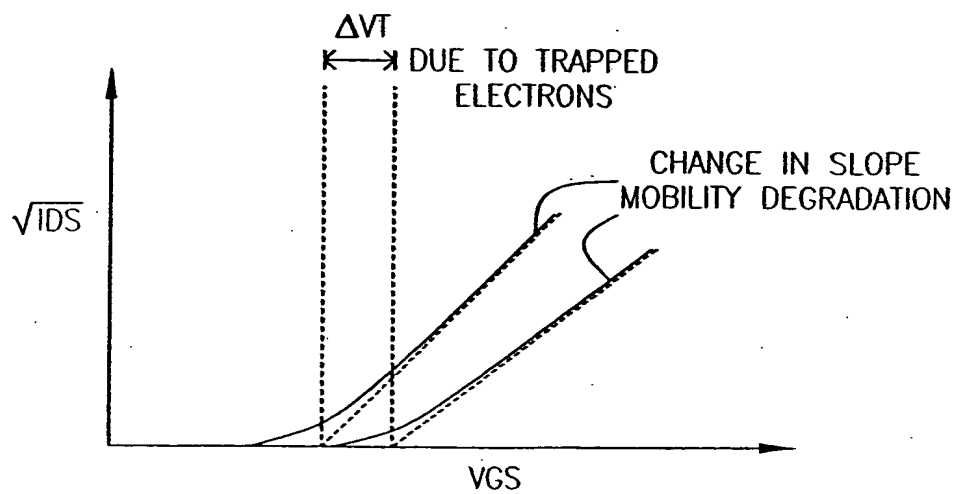


Fig. 9C

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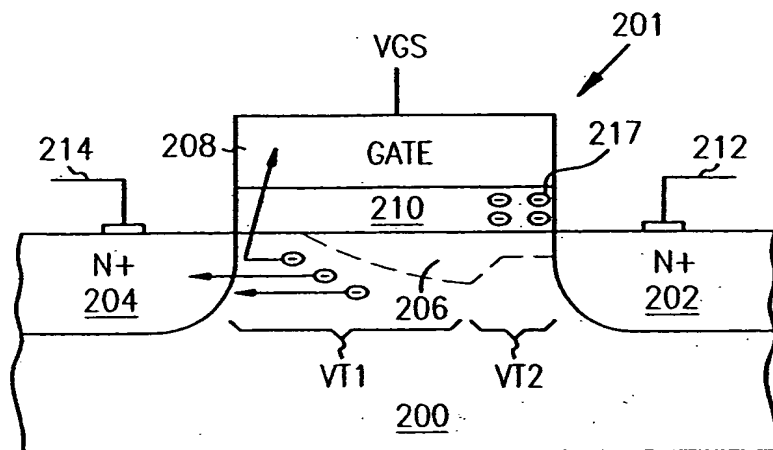


Fig. 10A

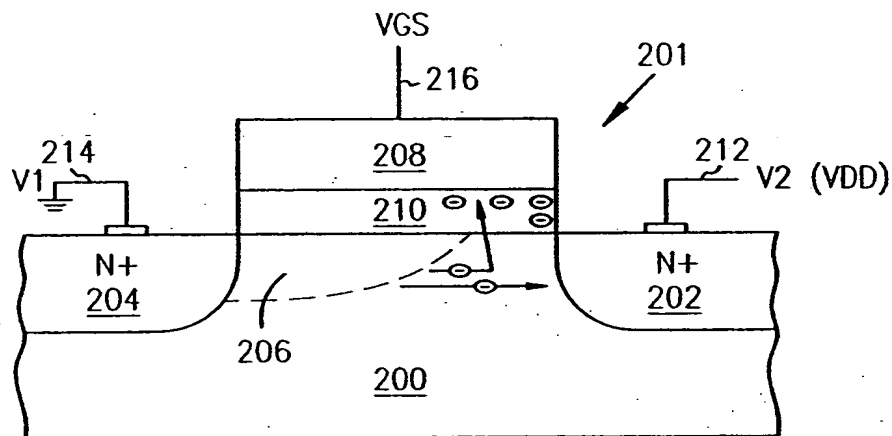


Fig. 10B

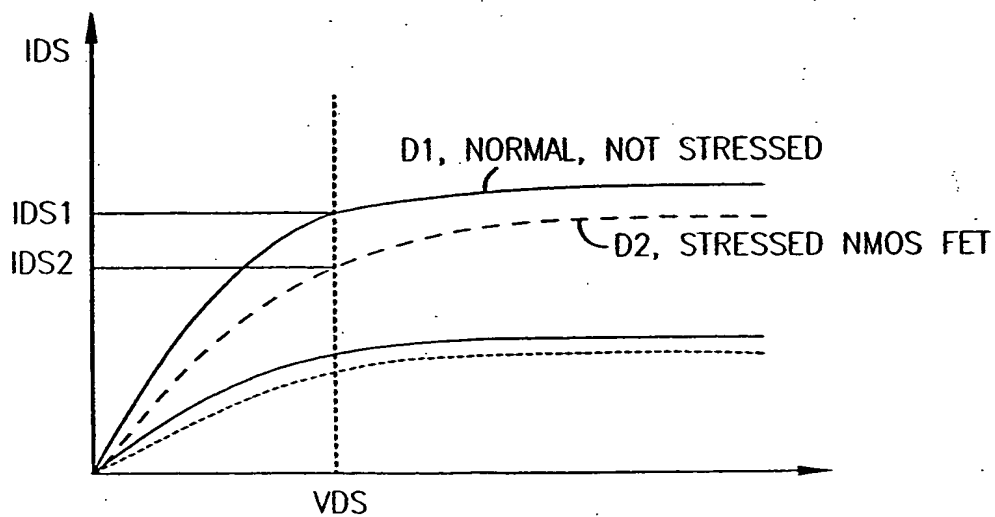


Fig. 10C

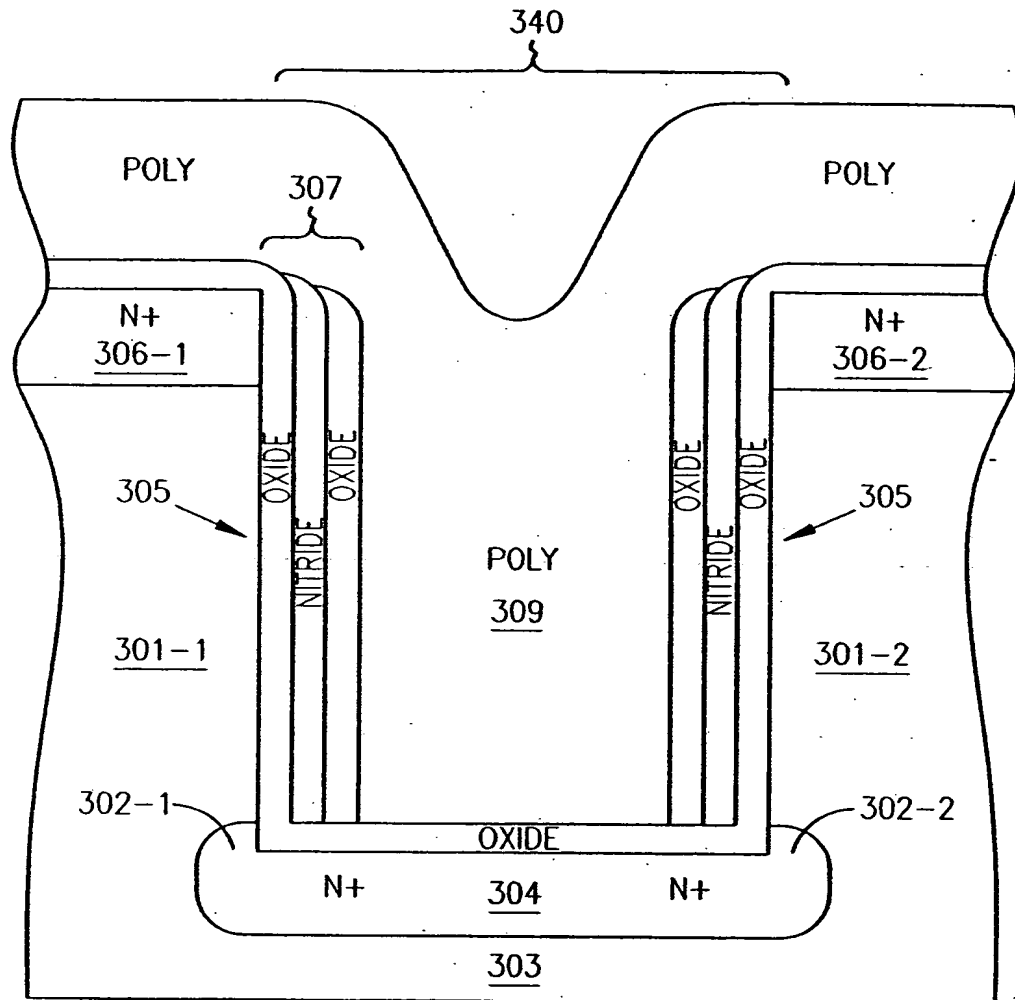


Fig. 11

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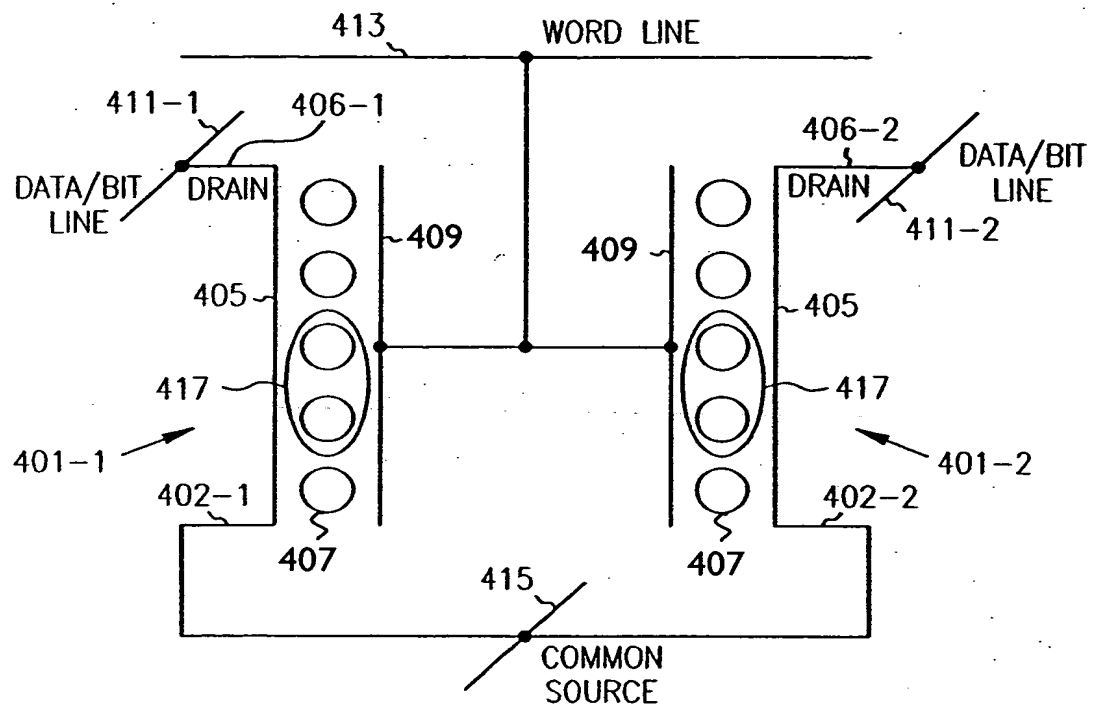


Fig. 12

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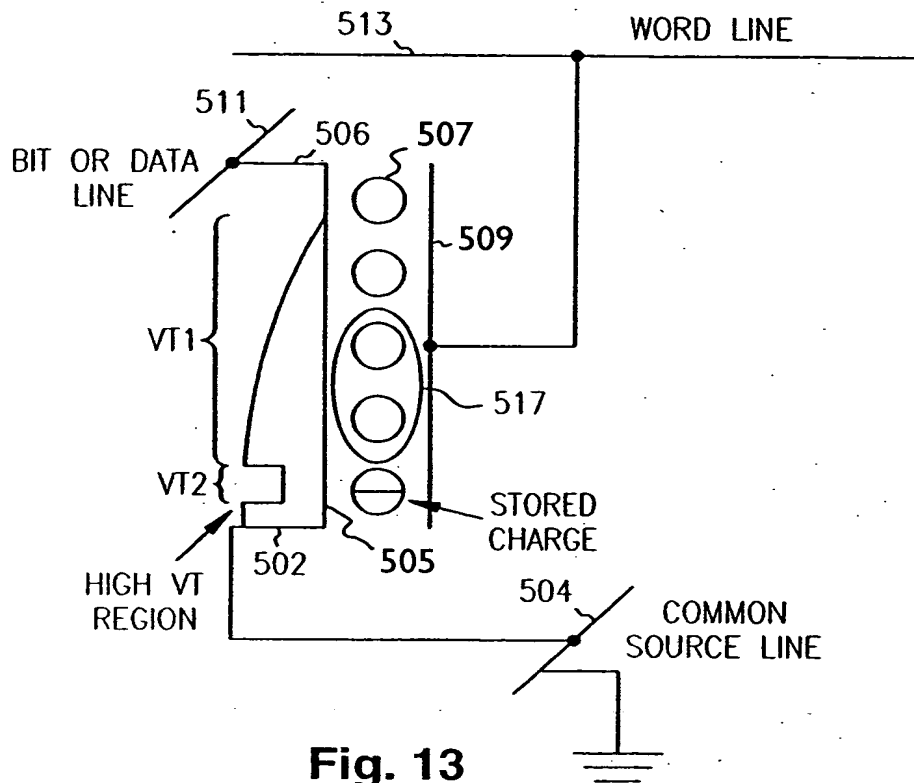


Fig. 13

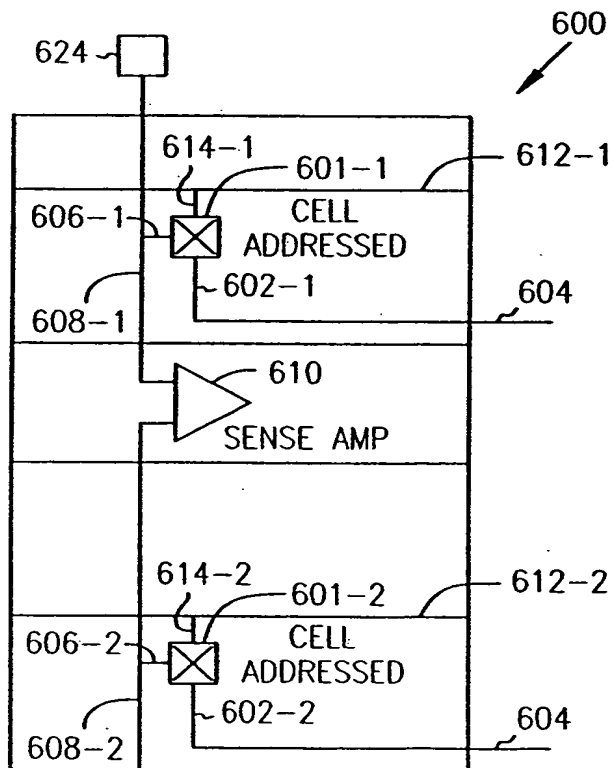
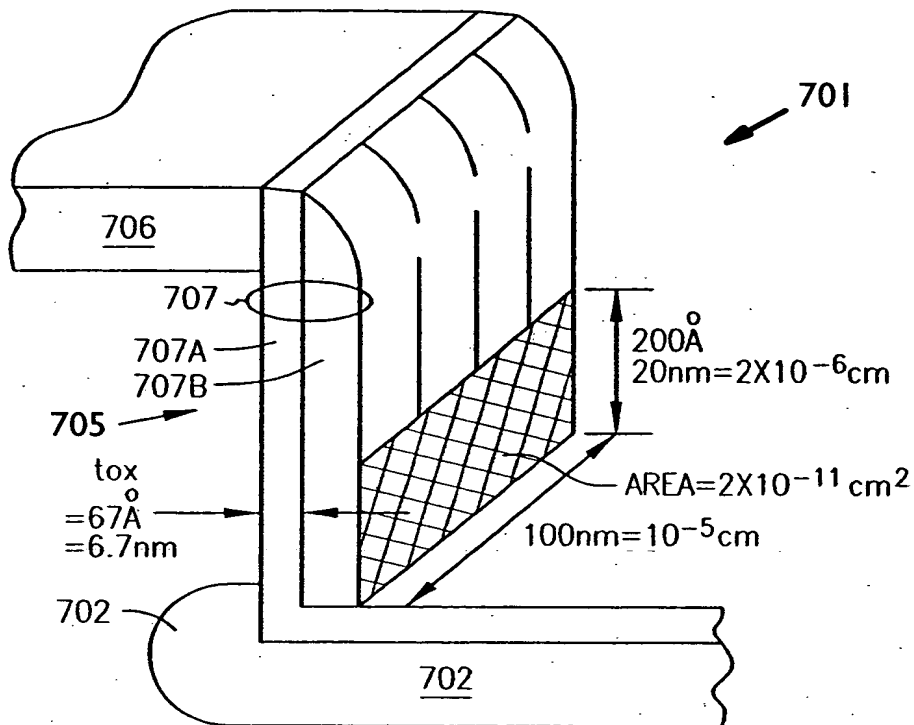


Fig. 14

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$$C_{ox} = \frac{1.06 \times 10^{-12}}{3 \times 6.7 \times 10^{-7}} = 0.5 \times 10^{-6} \text{ F/cm}^2$$

$$C_{ox} = 0.5 \times 10^{-6} \text{ F/cm}^2 \times 2 \times 10^{-11} \text{ cm}^2 = 10^{-17} \text{ F}$$

$$\Delta V = 1.6 \text{ V} \quad Q = C \Delta V = 1.6 \times 10^{-17} \text{ COULOMBS}$$

$$Q = Nq$$

$$N = \frac{160 \times 10^{-19} \text{ COULOMBS}}{1.6 \times 10^{-19} \text{ COULOMBS}} = \frac{160}{1.6} = 100 \text{ ELECTRONS}$$

Fig. 15A

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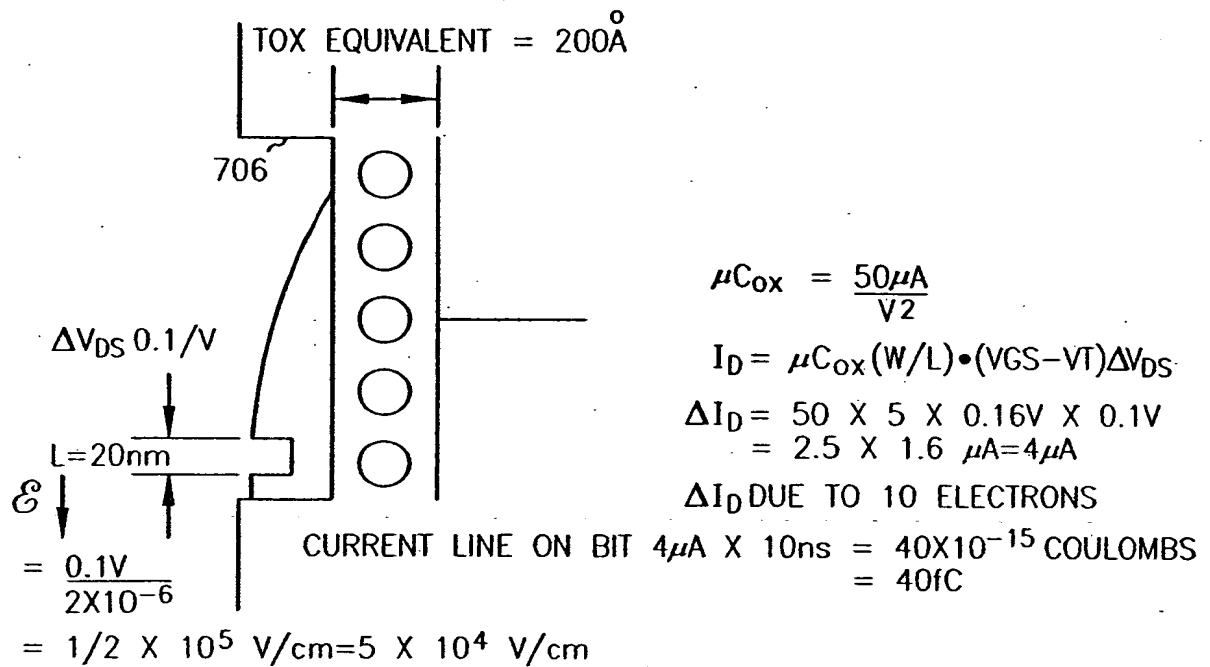


Fig. 15B

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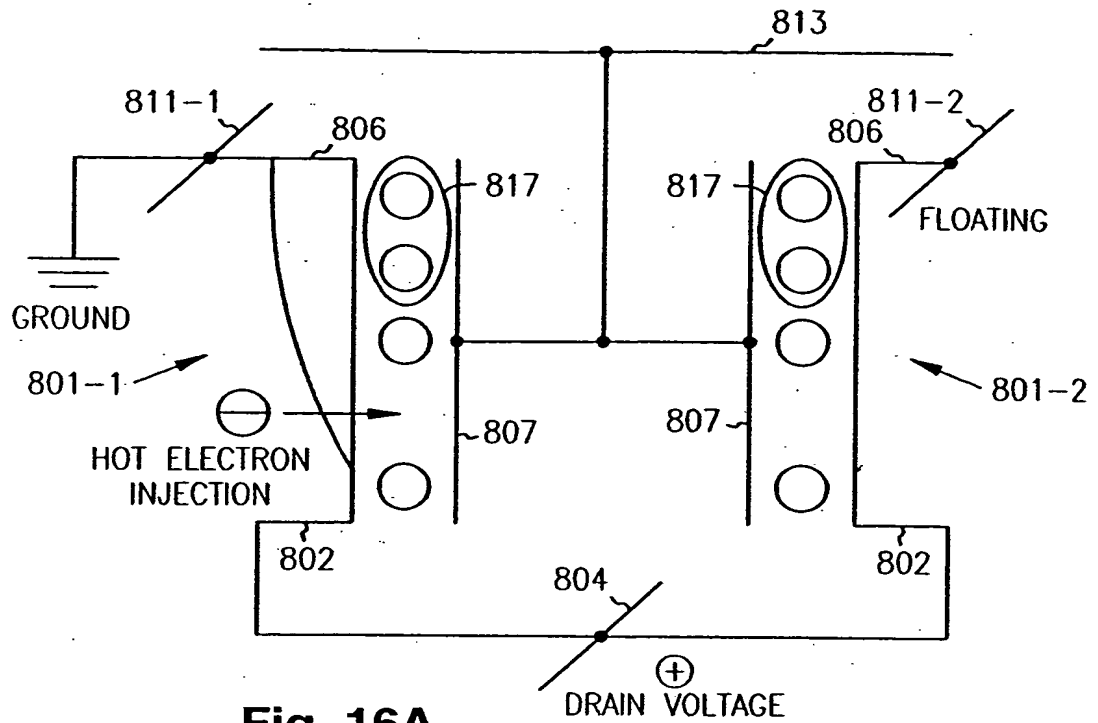


Fig. 16A

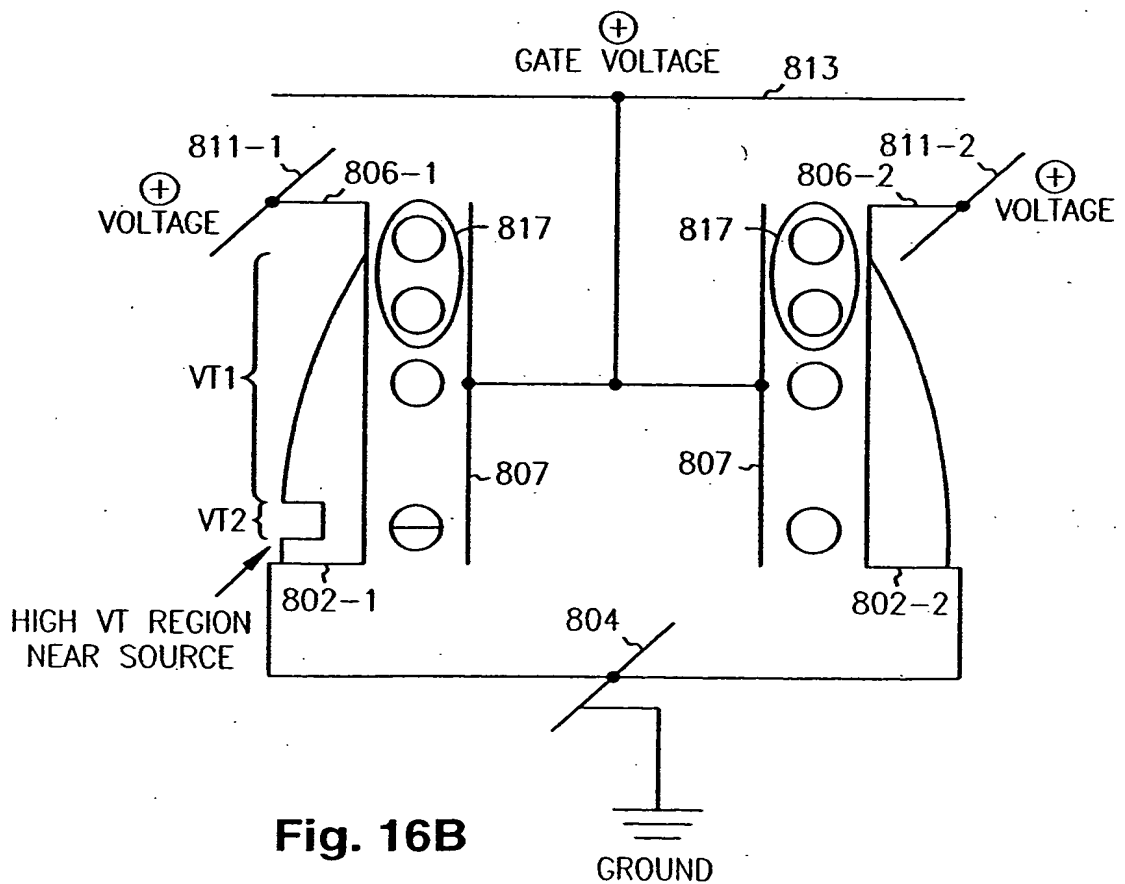


Fig. 16B

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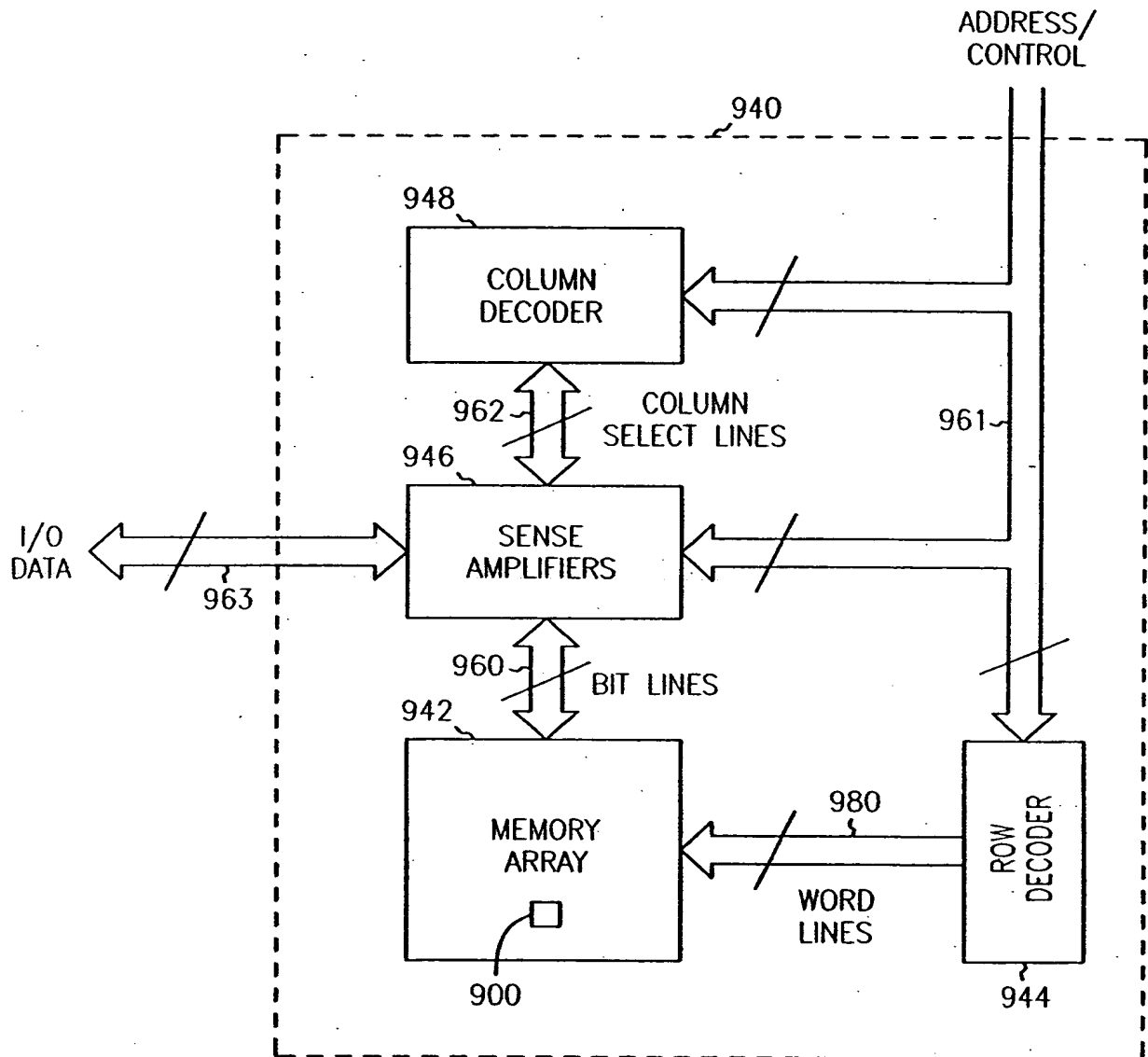


Fig. 17

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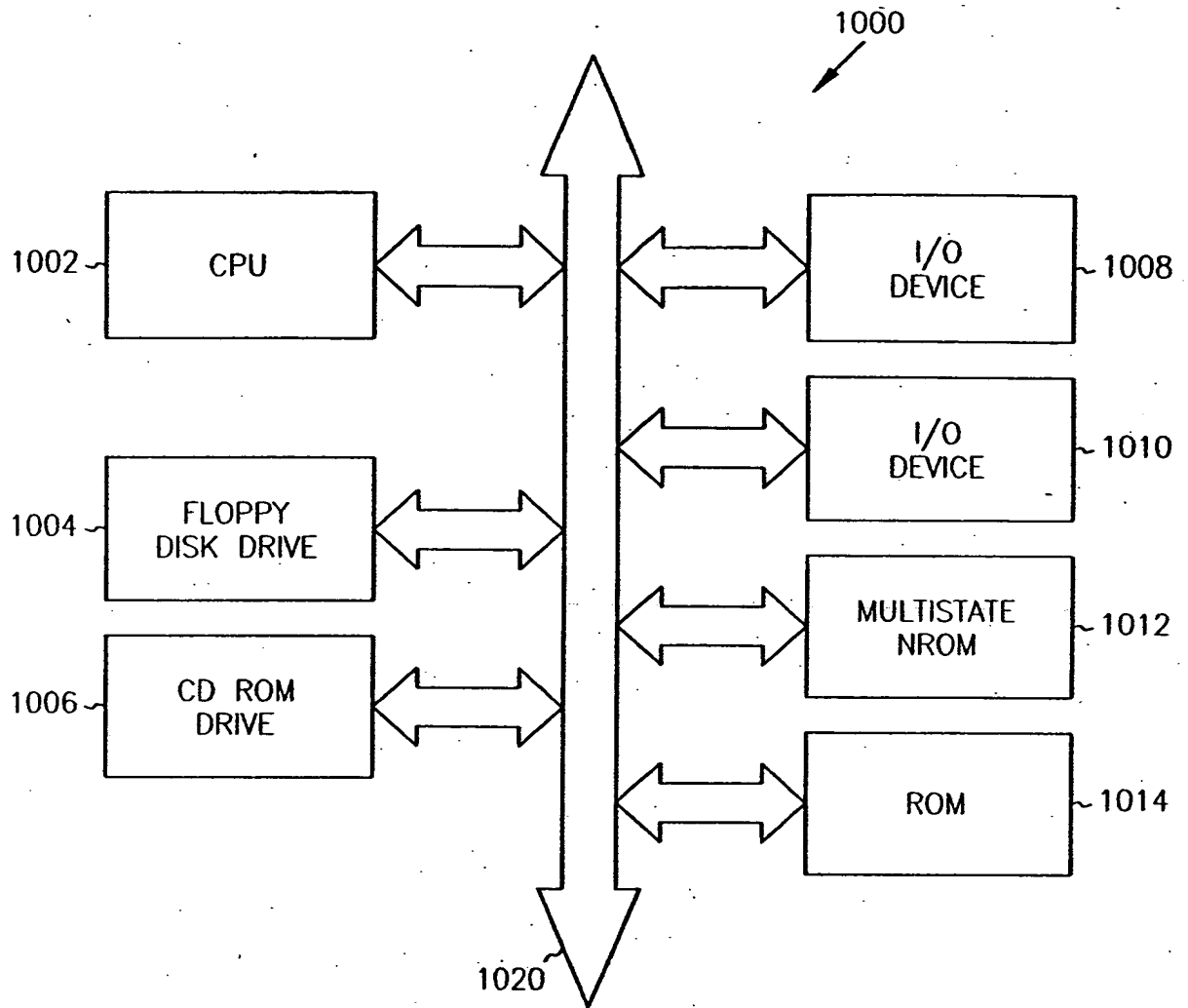


Fig. 18